IN THE ABSTRACT:

The abstract is amended as follows:

A jitter measurement circuit is described comprising delay elements arranged in a serially-connected chain, and first and second sets of circuitry. Each delay elements has an associated delay, an input and an output that produces a delayed version of the signal at the input configured to receive an input clock signal. The first set of circuitry is configured to detectdetects propagation of the significant instant on of the input clock signal through each of the delay elements and produces a pulse in response thereto. The width of the pulse is approximately equal to the delay of the corresponding delay element. first set of circuitry is also configured to output a signal responsive to the significant instant on the input clock signal. The second set of circuitry has one storage element corresponding to each output of the first set of circuitry, for receiving a trigger signal that is timed to correspond to a delay which is approximately half of the total delay of the chain, and for recording in the corresponding storage element any pulse that is active at the time of occurrence of the trigger signal. Thus, a jitter measurement is made based on the pulses recorded in the storage elements after a plurality of trigger signals has occurredreceives the signal responsive to the significant instant on the input clock signal and a first trigger signal. Also, the second set of circuitry latches onto the signal responsive to the significant instant on the input clock signal and is further responsive to a significant instant on the first trigger signal. A measure for jitter is determined from the latched signal responsive to the significant instant on the input clock signal.